

# KINGSTON ASH RECOVERY PROJECT

## MONTHLY REPORT

September 2012

**Aerial Image of Kingston Ash Slide (08/30/2012)**



Filename: ImageOnly\_20120830\_6x11

0 1,000 2,000 3,000 4,000  
Feet

Date of imagery: 08/30/2012

Tennessee Valley Authority  
Realty, GIS & Land Records

# KINGSTON ASH RECOVERY PROJECT

## MONTHLY REPORT

September 2012

### SAFETY

- Eight (8) individuals attended site-specific health, safety and environment (HSE) orientations during September 2012 – 2,273 project-to-date. Zero site-specific refresher courses were conducted during the month of September 2012 - 435 project-to-date.
- Sixty-nine (69) safety observation reports (SORs) were submitted during September 2012 – 3,114 year-to-date; 3,111 are closed.
- There was a first Aid on September 14, 2012 when a GUBMK laborer working for Civil Projects relocating pump hoses on Segment 2, slipped and fell back on a 6:1 slope, straining his knee and back. The employee returned to work after first aid treatment from the site paramedic.

### INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.

### ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL

- Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the main ash pond effluent TSS averaged 64.2 mg/L and the stilling pond effluent averaged 13.9 mg/L for September 2012.
- The sluice trench by-pass pipelines were installed and flow was diverted to discharge near the ash pond outlet structure (Agri-drains) on September 17, 2012. Sampling and treatment of the sluice trench effluent were suspended at that time. The sluice trench effluent and ash pond effluent polymer addition rates were adjusted based on TSS levels during September 2012. Ascetic acid was applied to control pH in the stilling pond.
- The plant started in September 2012 operating nine units and ended the month off-line in NID status.

### PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)

- Trans Ash placed and compacted dry fly ash during the month. Geosyntec provided quality control and assurance during September 2012.
- The Kingston Fossil Plant (KIF) plant operated from 9 to 0 units during the month, average of 5.0.

### CENOSPHERE CONTROL ACTIVITIES

- Daily pond inspections were performed for all ponds. Skimmer pumping from near outlet to cenosphere collection zones was carried out on all three ponds.
- There was no collection of cenospheres by hydro-vacuum truck performed in September 2012. Additional collection is planned for October 2012.



## ROUTINE MONITORING

### Surface Water Sampling

- Continued reduced scope routine surface water monitoring. All monthly stilling pond results received to date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit.
- There were rainfall events on September 3, 6, and 17, 2012 that triggered storm flow sampling in Swan Pond Embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring pH at three locations in the settling ditch system. The real-time pH results from the settling ditch system are monitored daily and used to make acid-dosing decisions to control the pH of the outflow.
- Continued daily TSS monitoring at the sluice trench, ash pond Agri-Drains and stilling pond.
- Split samples with Tetra Tech (EPA contractor) from the setting basin, clean water ditch, and stilling pond.

### Air Sampling

- All air monitoring results for September, 2012 from the PM2.5 TVA air samplers were below the current ambient air monitoring plan (AAMP) action levels.

### Data Management

- Provided monthly surface water and air monitoring results to the EPA.

### Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.
- Continued confirmation sampling support for middle embayment ash removal.
- Continue spoils runoff sampling from the two tanks of spoils material associated with the perimeter wall project.
- Completed the quarterly groundwater sampling event September 17 and 18, 2012.

## DREDGE CELL

- CP continued drying materials in the dredge cell and hauling to the active ash stacking.
- Geo-Con completed repairs in Segments 1 and 8, and began predrilling and subsequent jet grouting for repairs in Segment 7.
- Stantec drilled geotechnical borings and installed slope inclinometers in the southwestern corner of the relic area.

## LATERAL EXPANSION

- Geo-Con continued PWS construction with both rigs operating in Segment 2.
- CP began construction of the working platform for Segment 3, using materials obtained from cutting down the pad at Segments 8 and 7, and using dried spoils materials from the relic. Weir obstructions at the working platform for Segment 3 were removed / demolished.
- Stacking continued in the ash pond and lateral expansion.

## RIVER ENGINEERING EVALUATION / COST ANALYSIS (EE/CA) AND BASELINE ECOLOGICAL RISK ASSESSMENT (BERA)

- The public comment period continued for the River EE/CA (including BHHRA and BERA).

## EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- The contractor bidding period continued for the construction of Phase 1 (Lakeshore Peninsula) of the Swan Pond Recreation Area.
- A pre-bid conference was held at the site for prospective bidders.
- 100% Lakeshore Recreation designs were completed

## **MIDDLE EMBAYMENT**

- Ash removal from the middle embayment was performed during the month.
- Weekly middle embayment status reports were submitted.
- NTC concurrence KIF-12-002 was approved.
- The third concurrence is being held until the clean haul road work is completed.
- Completion of the clean haul road from the underpass along the clean water ditch and continuing south along Swan Pond road was on hold during the month pending completion of Segment 1 and 8 wall repairs construction.

## **COMMUNICATIONS**

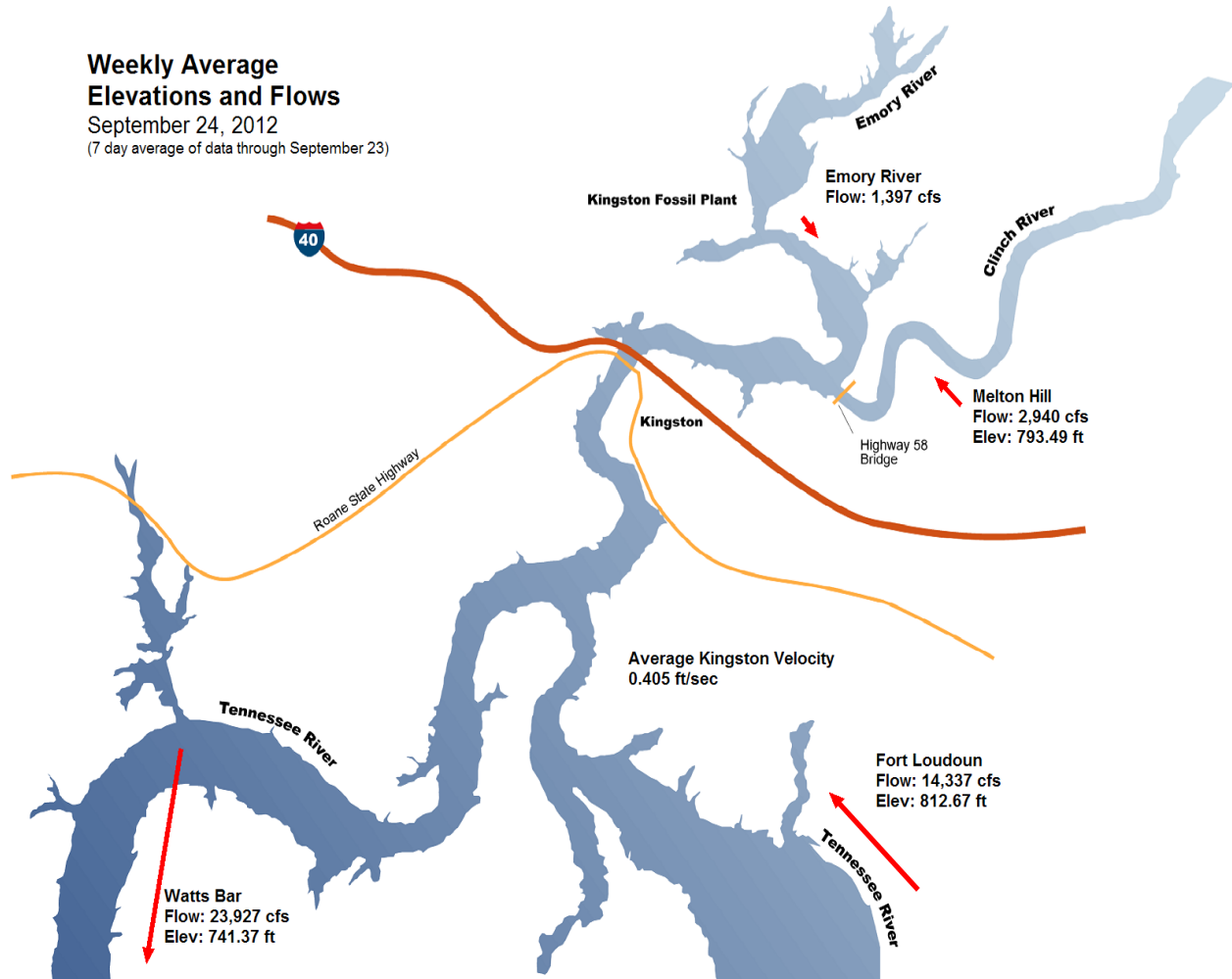
- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.
- Produced a special edition of the Inside the Cell newsletter featuring workers from around the site discussing why they work safe.
- Utilizing input from the CAG produced a full-page newspaper ad featuring comparison photos showing the progress on site. Ad will run in October 2012.

## RIVER OPERATIONS

### Weekly Average Elevations and Flows

September 24, 2012

(7 day average of data through September 23)



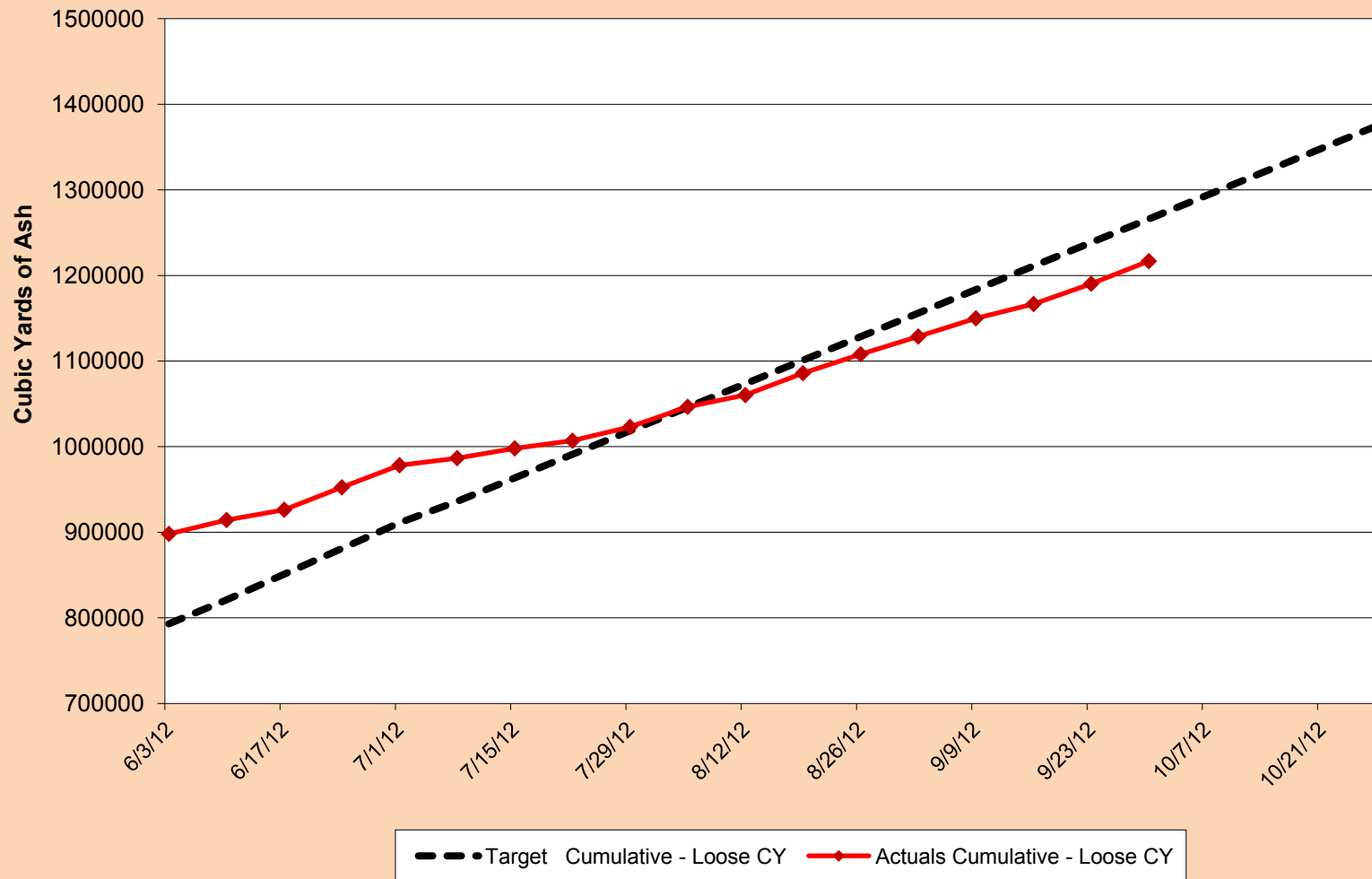


Kingston Ash Recovery Project			September 2012	Field Report
Safety			Monthly Total	FY – Cumulative Total
Near Misses			0	0
First Aid Incidents			1	14
Recordable Incidents			0	1
Recordable Lost Time Incidents			0	0
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Surface / Utility Water	5,702	48,254	261,985
Organization - TVA	Groundwater (Spring & Well)	255	2,654	15,557
Organization - TVA	Ash	756	1,333	9,973
Organization - TVA	Soil / Sediment	1,190	2,309	17,501
Organization - TVA	Biota	5,005	11,895	130,805

Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
<b>Ash Removal / Excavation</b>		
Total Removed from Middle Embayment	62,392	873,715
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	3,278	30,583
<b>Excavated Total</b>	<b>65,670</b>	<b>1,914,621</b>
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
<b>Placement</b>		
Total Placed in Dredge Cell	20,319	1,222,857
Total Placed in Lateral Expansion	24,703	574,644
Total Placed in Ash Pond	29,446	361,473
<b>Placed Total</b>	<b>74,468</b>	<b>2,158,974</b>
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
<b>Storage Handling</b>		
Total Removed from Lateral Expansion	640	51,473
Total Removed from Dredge Cell	53,212	613,411
Total Removed from Ballfield	2,995	449,924
<b>Removed from Storage Total</b>	<b>56,846</b>	<b>1,114,809</b>
<b>Net Removed to(from) Ballfield Storage</b>	<b>12,871</b>	<b>(132,936)</b>
<b>Net Removed to (from) Relic</b>	<b>(9,985)</b>	<b>(176,357)</b>

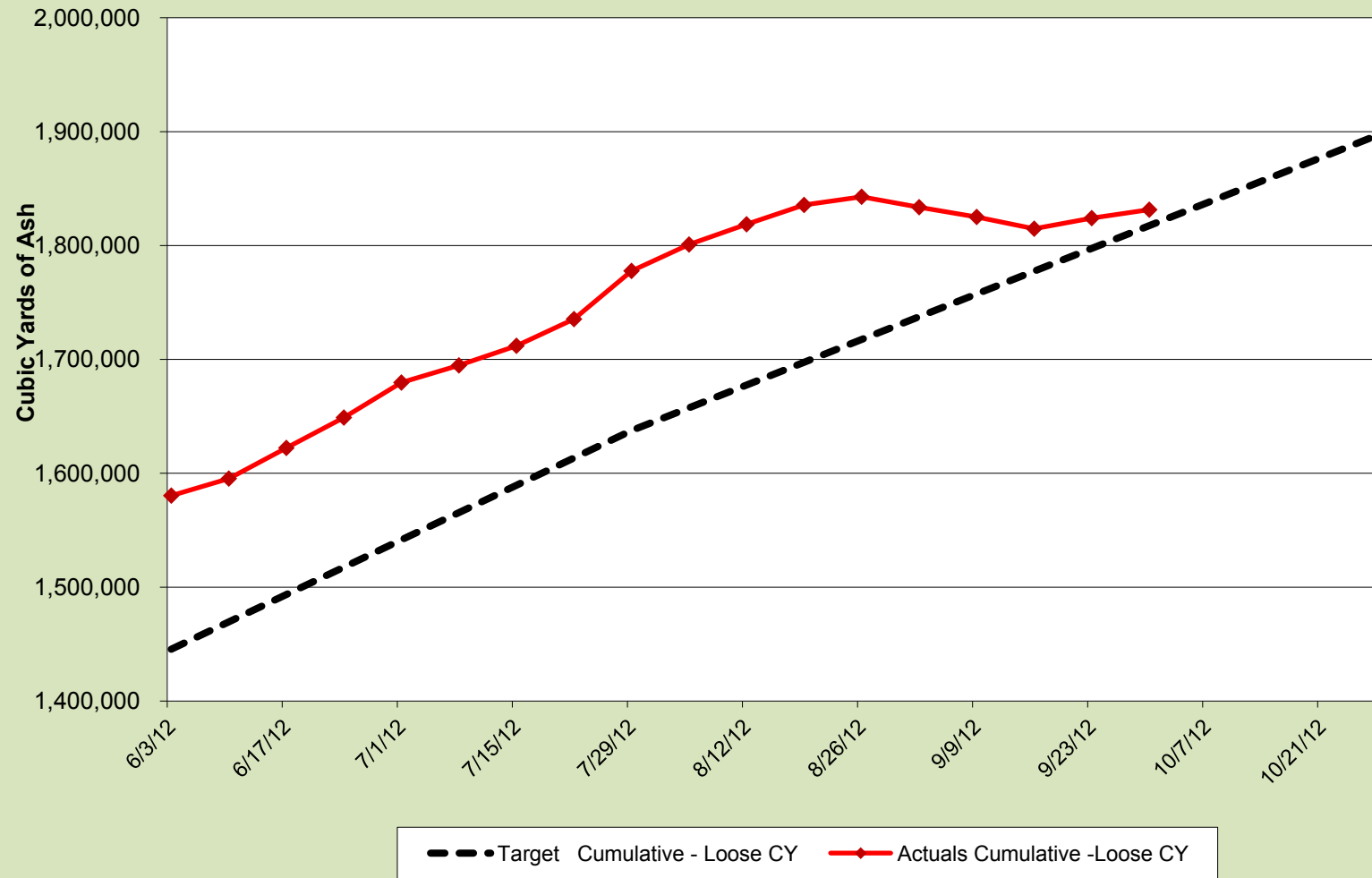
For period ending September 30, 2012.

# Ash Excavation from Middle Embayment Weekly as of September 30, 2012

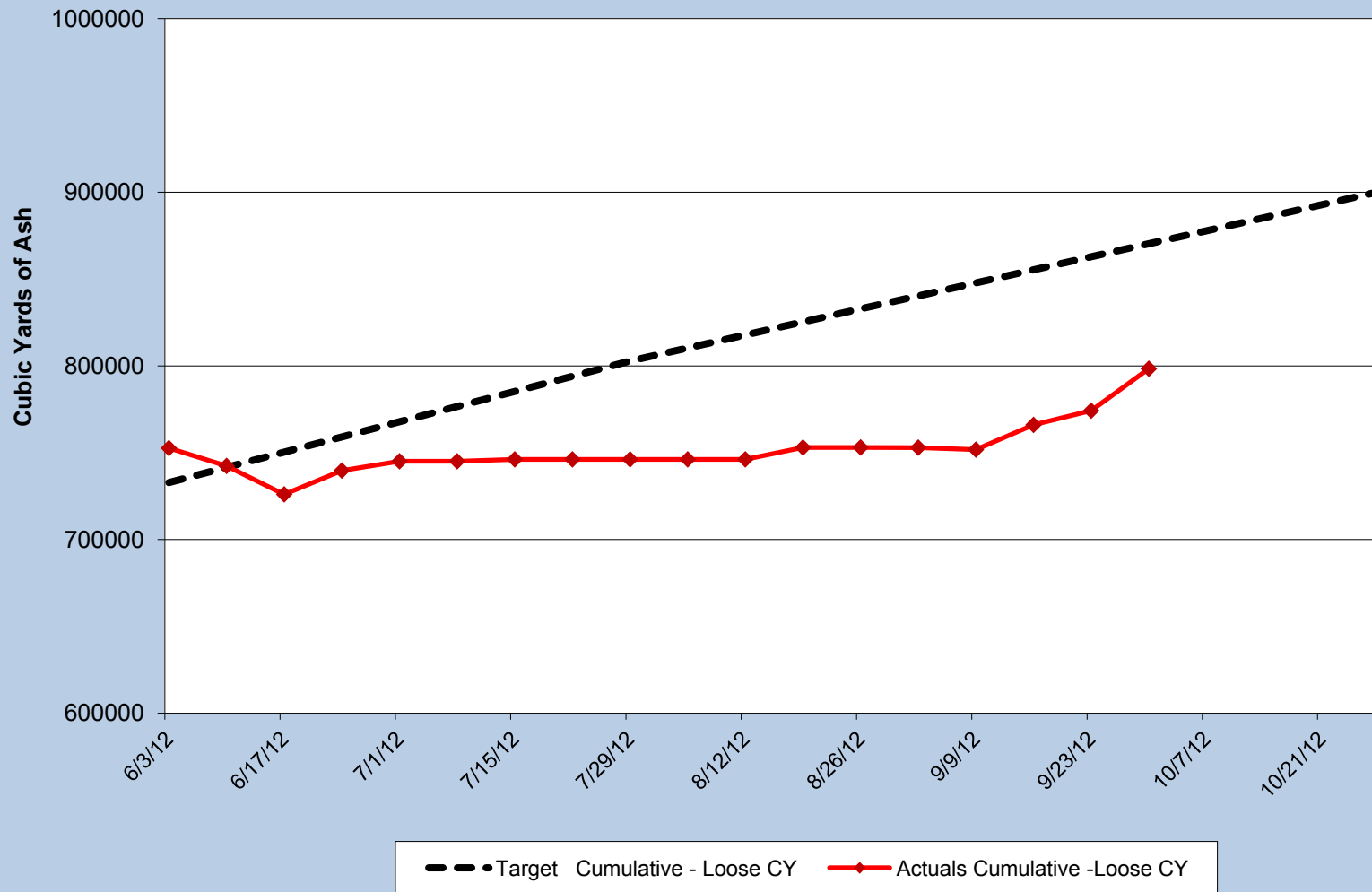




### Ash Stacking in Dredge Cell Weekly as of September 30, 2012



**Ash Stacking in Lateral Expansion  
Weekly as of September 30, 2012**



**Perimeter Wall Stabilization Segment 1, 8, 7 & 2  
Weekly as of September 30, 2012**

